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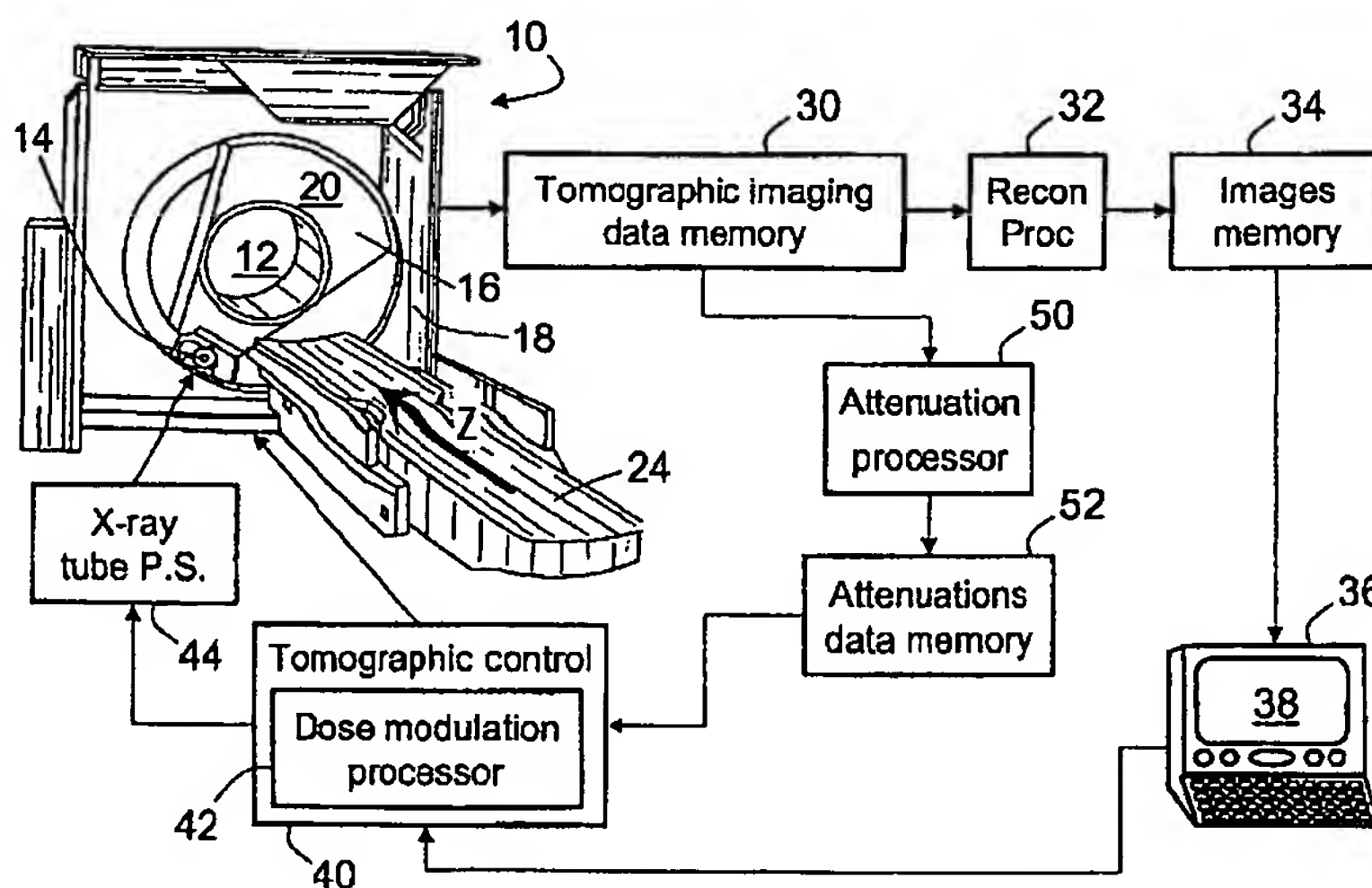
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**Declarations under Rule 4.17:**

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,

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(54) Title: DYNAMIC DOSE CONTROL FOR COMPUTED TOMOGRAPHY



(57) Abstract: In a dose modulation method, transmission tomographic imaging data of an associated imaging subject are acquired using a radiation source (14) revolving around the associated imaging subject. During the tomographic imaging, an estimated attenuation of radiation is determined for an upcoming position or angular bin (721, 82) of the revolving radiation source based on attenuations determined at previously acquired positions or angular bins (701, 84, 90) of the radiation source. Prior to acquiring tomographic imaging data at the upcoming position or angular bin, a level of radiation produced by the radiation source is adjusted based on the estimated attenuation of radiation.



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